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OUT OF DOORS FOR WOMEN

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OUT OF DOORS FOR WOMEN.

VOLUME 1.

JULY 1894.

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MY POND.

It was my largest wash tub, but it proved so useful and ornamental that I never regretted sinking it down in the earth, keeping it filled with water, and putting in a hyacinth, and other aquatic plants. The water hyacinth was a new plant, and the children in the neighborhood came over every day to see the queer leaves and watch it float around. So enthusiastic was one small boy I fished him out of my tub three or four times in the course of the summer. It is missionary work to interest the children in God's beautiful out of doors, so I keep a box of neat packages of seeds, and distribute them, and many a little one plants them, and begins to find how delightful it is to "have a garden." We all watched for the flower and when the first one came, so dainty and exquisite, one little girl said "it was a water fairy that lived in a tub." But my pond did good, not only to us grown folks, and the children; but the dogs, the cats, and the birds used it for drinking out of. Most of us are thoughtless about our thirsty humble brothers and sisters. But it rejoiced my heart to see the dogs coming from half a mile away for a good drink, and about nightfall the cats made their appearance, and early in the morning the birds perched on the edge of the tub, and trilled a merry song of thanks. Try a tub and a water hyacinth this season, and see how much delight you will get out out of it.

SISTER GRACIOUS.

NOTES

BY OUR TIMES.

Pentstemons are particularly adapted to cultivation even under adverse circumstances. They will endure great drouth, and are therefore suitable for our summer gardens. *P. cobæa* and *P. grandiflorus* are said to be excellent varieties.

Campanula, or Canterbury bells, makes a remarkably showy plant in this climate and deserve more attention. The "cup and saucer" varieties are peculiarly interesting, though not more lovely than the older varieties.

It is often difficult in selecting plants for exposed situations, such as hanging baskets or rookeries, to find those that can bear drouth, even for a few hours. The well known sedums with their succulent foliage make an excellent "stand by." Their blossoms are of every shade of color and look well against a solid back ground.

Until one sees in bloom the white poppy, *Romneya Coulteri*, he can have no real conception of its exquisite beauty. A native of Southern California it is yet so rare that but few people ever see it except in the garden of some florist or flower enthusiast.

Trees are now felled to a considerable extent by electricity. A platinum wire, heated white-hot by the current, is used, stretched between two poles as a saw. There is less work than with a saw, no sawdust is produced, and the charring of the surface of division tends to prevent decay. In some cases the time required to fell a tree by this method is only one-eighth of that necessary for sawing.—*Literary Digest*.

Electricity, little understood and capable of endless study, is without doubt destined to have great influence over the horticultural world, not only through its use in labor-saving devices, such as the above paragraph relates, but in experimental work upon plant development.

Phacelia Orcuttiana is, with its bright white and yellow flowers, an excellent companion for *Phacelia Parryi*, and both are very serviceable as cut flowers.

It is stated by the Washington Star, that in Vienna, Indian corn or maize, is extensively used in the manufacture of paper, and "Allgemeine Zeitung," a scientific journal of importance, is printed on sheets made of this product.

An amateur, who is most successful in rooting rose cuttings, has given us her methods as follows: "In summer I take the new growth or tender shoots; in winter, the woody cuttings. I

dig a trench a foot deep, fill it several inches with a very hot compound, this I cover with a layer of soil so that the cuttings will not touch it, then I place the cuttings just as I want them to grow, water freely and tamp the soil about them firmly."

"God in his heart made Autumn for the young
 That they might learn to accept the approval of age
 In golden woods and starry saxifrage
 And valleys all with azure mists o'er hung.
 For over Death a radiant veil He flung
 That thus the inevitable heritage
 Might come revealed in beauty and assuage
 The dread with which the heart of youth is wrung."

—A. M. F. Robinson.

For some time past dealers have been advertising for the benefit of nurserymen and fruit growers a protective wrapping, or shield, for young trees made of the Yucca Palm of the desert. We know nothing of its use in the field, but as a new decorative material it is excellent. Pliable but strong, a delicate cream in color, a coarse net work of fibre yet easily painted upon, it may be used in a thousand of those dainty ways in which women love to decorate their homes. As covers of a fine collection of mounted botanical specimens, with a rough sketch of the Yucca thrown across the title page, is one woman's suggestion.

The gum which exudes from the apricot tree is a very useful paste, equaling the best gum arabic, if dissolved in vinegar or water.

MEXICAN NOTES.

The morning of the 26th of April, 1894, found the writer entering the City of Mexico in search of many things horticultural. Just around the corner of the National Palace a familiar face was met in the person of Mr. Fred Higgins—when last seen a resident of Baja California.

Later in the day a visit was paid to the Museo Nacional, where by the merest chance I had the pleasure of meeting the national botanist, Dr. Manuel Urbina, through whom I had the pleasure of visiting the natural history rooms and herbarium, not yet open

to the public, and was also given an introduction to Dr. A. L. Herrera, one of the best known naturalists of Mexico, to whom I was subsequently indebted for many favors.

On the 7th of May, having hunted well over the old Aztec city, so full of historic reminders, I paid a visit to the beautiful town of Cuautla, which lies within the tierra templada, where Jack Frost is never known to visit. Near this town I found beautiful trees of the wild fig, and many wild flowers and shrubbery whose acquaintance I had not previously made. It is not the object of this article to give an account of the many beautiful plants that were seen, nor to dilate upon other tropical beauties. It will perhaps be more practical to speak of some general existing conditions observed in this sister republic of ours.

One great surprise was to observe the arid condition of so large a portion of the country; my visit was at the warmest and dryest season of the year it is true, but the northern portion of the republic is fully as arid as the southwest portion of the United States, and in fact the same conditions exist throughout the larger part of the tierra templada and tierra fria of Mexico. The tierra caliente is abundantly supplied with water, I judged from what I saw and was told by others who had traversed larger areas than I.

Another surprise was the inferior quality of most of the fruits sampled. The oranges first sampled were very sweet but insipid; others eaten later were of fine flavor but inferior in other respects—in fact in no wise equal to those of California. This is doubtless due to the non-introduction as yet of the finer varieties, for certainly Mexico should be capable of producing as fine an orange as any country, and those of Guadalajara are said to be fine in every respect.

The small apricots were hardly to be recognized—scarcely as large as plums but of fair flavor. A good drummer should be able to sell every tree in the nurseries of California, if he were to travel one season through Mexico with truthful representations of our fruit.

At Irapuato the natives offer the passengers of the Mexican Central railway fine strawberries the year round. The tourist is often disappointed to find only one layer of the large luscious

berries on the top of his basket, but he will find the small berries that fill the bulk of the basket just as sweet, and if philosophical in mind will congratulate himself on having thrice as many berries for his money as if they were all large!

The native fruits were mostly pleasant, though some are not at first palatable, until a taste has been acquired for them. The Mango, Mamme, Sapotas, Anonas, Pineapples and Bananas were all duly tested, but in general pronounced inferior to our temperate fruits.

Another surprise was to find potatoes, raised in California, upon the table in Mexico City — where I was told they retail at twenty-five cents per pound! (at wholesale bringing eight cents per pound).

Many Americans are now turning their attention to Mexico, where many opportunities for making money await men of enterprise and capital. The poor man has no showing, unless he goes with a capitalist or strong corporation as his patron.

Coffee receives the greatest attention and is very remunerative at the present time. But many turn from coffee after careful investigation of the prospects and enter some other line of production or trade.

Day labor is cheap; one strong young fellow offered to work for me for four dollars per month and board himself! Twenty-five cents to a dollar a day are the usual wages paid — probably 36 cents a day being a fair average. Lands in large tracts can be bought as low as \$1.25 per acre, and from that up to several hundred dollars per acre.

Near Mexico City the cultivation of the Maguey plant is doubtless of primary importance. Corn and beans are also important crops in Mexico, and, with red peppers, form the bulk of the food of the lower classes — to which three-fourths of the population of the republic belong.

Mexico is a land of strong contrasts: the rich and the poor are farther apart even than in the United States; the several zones lying one above the other offer all the vegetable growths of tropic and temperate regions within a few miles of each other; and last, but not least noticeable we are brought to contrast the an-

cient Aztec, the Spanish, and the more modern styles of art and customs—all side by side.

Gross ignorance and superstition still hold the lower classes in subjection. Vice and filth equally abound, and disease of every description make strong inroads on the population annually. Strangers almost invariably become victims of some disease the first year of their residence, and often, as in the writer's experience, within the first month of their arrival in the country. On the 20th of May the writer was taken with a fever, and on the 8th of June he was glad to return to California to recuperate.

C. R. ORCUTT.

THE FRAGRANCE OF FLOWERS.

Even the rose, the queen of flowers, with a sweet and delicate fragrance, delightful to almost every one, is to a few unhappily constituted organs, a cause of what is called the rose fever.

And the sweet pea, "the flower of Sicily," has an odor so sweet that of all the sixty species of the genus *Lathyrus*, it is designated as *Lathyrus odoratus*, the sweet pea. Yet lovely as is this flower and with an odor as if indeed it had by art been sweetened, the perfume is sometimes so strong as to cease to be agreeable and quite too impressive and diffusive to be regarded often suitable for a sick room. Though as a graceful and fragrant climber it is one of the most delicate and beloved of flowers, its presence always seeming to charm the surrounding atmosphere with its fragrance, beauty and grace.

But it is by no means comparable to the modest and quiet presence of the English violet, the flower of flowers, that hardly makes its presence known unsought, though a delicate, but never oppressive aroma distils and delights the very air in which it blooms.

The mignonette, *reseda odorata*, is another flower quite inconspicuous but for its most insinuating fragrance, the beauty of its flowers are not as attractive as the pea and the violet but its fragrance is very acceptable, soothing and cool. Many years ago I gave a handful of these humble sweetenesses of life to a friend to whom the plant was new, and she saw in it no beauty to make it

desirable and scarcely observed that it was fragrant in the least. In justification of its presence in the bouquet I gave her, I said: "It is fresh and sweet." "Yes," my friend promptly responded, "It is fresh and wants salting." I added, "Do not smell of it but just let it be in your room and you will learn to love it." My friend the very next time I met her expressed her great admiration of the unobtrusive charms of the fragrant mignonette. Its language is moral and intellectual beauty.

Such a wealth of flowers adorn our path; it is impossible to do justice to their beauty and sweetness; yet there are some whose grace and beauty seem a compensation for their lacking of fragrance. The orchids and cactuses are among such superb flowers. But incomparable is both the beauty and fragrance of the apple blossoms and pond lilies of dear New England.

Youth is like the bloom upon the cherry tree! E. E.

MEXICAN FLOWER MARKETS.

The City of Mexico possesses many interesting markets, and the market places are perhaps the most typical of the Aztec regime. The raising and selling of cut flowers is almost exclusively in the hands of Indian women, if not entirely — there being only one foreign florist, whose business in cut flowers was apparently small. The Indians raise the flowers outside of the city and bring in every morning to the market, an iron pavillion near the cathedral built on the site of the Aztec temple.

On the first of May roses and pansies and camelias were in the greatest abundance, while some old fashioned flowers, carnations, poppies, bachelor buttons, sweet peas (homely varieties), larkspurs and lupins were displayed in smaller quantities.

The large formal bouquets gave little scope for the display of artistic talent, but the beautifully marked varieties of pansies made everything containing them attractive.

Various street vendors of artificial plants and flowers, and vendors of orchids or other native plants was another noticeable feature of the city's floricultural trade. In May Indians daily paraded the streets with blooming plants of *La Flor de Mayo* (*Laelia majalis*), the bright magenta colored flowers lending beauty to the picturesque street scenes. C. R. ORCUTT.

NOTES AND NEWS.

Prof. J. A. Udden, 1000 Thirty-eighth street, Rock Island, Ill., desires information on the great sandstorm, which occurred in Southern California on the 22d of February, 1894, as to the quantity and kind of dust blown about, direction of wind, etc.

[The Associated Press reports concerning the sandstorm cited were no doubt greatly exaggerated, though the writer has not seen them. I was at the time on the Mohave Desert, where the storm was likely at its worst, and later in the day was in Los Angeles. The quantity of dust in the air was no greater than on other occasions, usually of a fine, light chocolate color, but varying according to the locality and character of the soil surrounding. A journey over the Southern Pacific Railway, from El Paso to Yuma, would almost any day give the traveller a just conception of our so-called sandstorms.—EDITOR.]

Mr. C. G. Pringle is making botanical collections this season in the State of Oaxaca, Mexico.

A DRESS FOR THE GARDEN.

A dear old lady stood by my front window and exclaimed, "O! come here and see this immodest and shameless woman. What *are* we coming to?" I ran, and beheld a pretty young girl standing beside her bicycle with pants made of dark cloth and a tight-fitting jacket, made long. "Grandma," said I, "that is a brave girl. She is modestly and suitably clothed for the work in hand. Many women have had broken limbs and bad bruise strying to ride a wheel, with skirts, and it is a glad day when they can step out of the old rut and be sensible, without being looked upon as strange and immodest." There would be many workers in the garden if the dress was convenient. Now the long skirts get into the way of spade and hoe, and the waist and sleeves are too tight, and doctors mostly make their living from their many women patients. But we are "moving." The pretty suit is yet to be invented that will allow full play to the limbs and make digging, hoeing, and weeding delightful. Once convince girls that they need not look like "fright" in a working rig, and *then* see the improvements in our back yards.

SISTER GRACIOUS.

THE PHYSICAL CONDITIONS OF LIFE IN THE DEPTHS OF THE SEA.

BY FRANK C. BAKER, CURATOR OF ZOOLOGY, FIELD COLUMBIAN
MUSEUM OF CHICAGO.

Recent observations on the deep sea have so enlarged our knowledge on that once obscure subject, that we are now enabled to more clearly understand many of the perplexing phenomena, and to classify the varied and curious inhabitants of that region. The results of the Challenger expedition, and more recently of the various trips of the United States Fish Commission steamers Fish Hawk and Albatross, have added greatly to, in fact I may say have given us our only knowledge of the deep sea.

Formerly, when dredging with the usual appliances from small boats, 150 fathoms (900 feet) was considered the extent to which successful dredging could be carried on. Yet within the past ten years successful dredging has been carried on at a depth of about two and a-half miles. If one stands on the roof of a high building—say 200 feet high—and looks down, the idea of collecting a good representation of the insects and plants on the ground at its base by dragging a dredge or trawl by a line let down from the top of the building strikes one as preposterous. Yet this is only about thirty-four fathoms high. Multiply this by fifty or sixty and the idea seems even more unreasonable. Yet living animals have been secured from a depth of not less than one hundred times the height of the house first spoken of.

The waters of the earth have been divided by naturalists into three regions. The first is known as the Litoral Region, which is regarded as extending from the actual shore out to the limit of 100 fathoms, and is that to which light can penetrate, and where, therefore, marine vegetation can exist. Beyond this point it is pretty certain that light does not penetrate sufficient for the growth of sea-weeds. Outside this 100 fathom limit the borders of the continents gradually slope to the bottom of the ocean, which is found at a depth of about 2,000 or 3,000 fathoms.

On these continental slopes, which have been given the name of the Archibenthal Region, the conditions are often very favorable for life. There are numerous currents of warm, fresh water sweeping along, bringing supplies of food to the animals along their track. These currents, however, are rarely found below 700 or 800 fathoms, and this depth corresponds to a temperature of about 40° Fahr. Beyond the Archibenthal Region the cold, dark area of the ocean bottom is reached, to which has been applied the name of the Benthal or Abyssal Region. The division between the Benthal and Archibenthal regions is more a matter of temperature than of depth. Below the depth of 800 fathoms, where a temperature of 40° is found, the temperament diminishes at the rate of one-tenth of a degree to 100 fathoms, to the freezing point. There is no reason to suppose, however, that the water in the Benthal Region ever becomes congealed.

Among the chief characteristics of the last two regions, which, since the differences between them are more of degrees than of kind, need not be considered separately, is the composition of the sea water. Chemists have determined that the water of the deep sea varies in the proportions of mineral salts, carbonic acid and air contained in it very much as does the surface water. The warm water of the tropics at the surface contain more salts and less nitrogen. As the water flows northward to the Arctic regions, the salts sink to the bottom as the water is cooled. Therefore, the Polar waters are less saline and contain more nitrogen than do the warm waters of the tropics. The proportion of air in the water is closely related to the temperature, and the amount of oxygen diminishes gradually from the surface until about 400 fathoms are reached, when it ceases to change.

Carbonic acid is said by some chemists not to exist in a free state in sea water. This, however, may well be questioned since the shells obtained from the deep sea are all eroded and the devices of the animal for protection against erosion so apparent. Erosive agencies, like those due to carbonic acid found in the species inhabiting the Litoral Region, are very recognizable in various species found in the abyss. This fact leads us to conclude that the composition of the water of the deep sea does not differ materially from that of any other sea water.

The physical conditions, however, are vastly different. It is difficult to imagine what the pressure must be at a depth of 2,000 fathoms. Without doubt the pressure at some points on the oceanic floor may amount to several tons to the square inch. Rope made impervious by tarring has been reduced one-third in its diameter by a descent into these depths. We must conclude from these facts that all the animals living in these depths and subject to these conditions must have their tissues so constituted as to permit the free permeation of the water through every part of their bodies to equalize the pressure. How such a condition is possible without putting an end to all organic functions is one of the greatest problems of modern biology.

This looseness of tissue is very conspicuous in the animals obtained from the deep sea, their flabby and gelatinous appearance upon reaching the surface is notorious, and many rare and valuable specimens have been destroyed by too rough handling by some careless assistant. In fishes this condition is most noticeable, although some of the most flabby specimens are armed with very formidable teeth. We can conceive, however, that under the great pressure of the depths of the sea, this loose and flabby tissue may be reduced to a condition resembling iron or steel, and the animals may be as lithe and active as their shallow water relatives. The influence of darkness in the Abyssal Region of the sea is often spoken of. It is a curious fact that the inhabitants of the deep sea are either destitute of visual organs, or have excessively developed eyes, far beyond the normal of the group to which they belong. This fact is evidence that the depths are very much darker than the shallows. This is not evidence enough, however, as some physicists have maintained that the depths are shrouded in complete

darkness. The presence of large and remarkably developed eyes in many abyssal animals shows conclusively that light of some kind does exist on the floor of the ocean. It seems absurd to suppose, as many scientists have, that the phosphorescence of certain animals is a sufficient factor to produce the development of such enormous and complicated eyes in a multitude of deep sea species.

We find in a general way that the physical conditions are much simpler but more energetic in the depths of the sea than in the shallow waters of the Litoral Region. The effect of temperature is marked in the distribution of life over the warm and cold areas of the oceanic floor. The influence of pressure, partial darkness, and the quietness of the abyssal waters, is yet too imperfectly known to draw conclusions from. The sea bottom is very irregular, in some places being formed of bare rocks destitute of animal or vegetable life. Such a tract, however, is usually in the path of some powerful current like the Gulf Stream. In other parts of the oceanic floor the fauna is found on the walls of submarine cliffs, and is here difficult to obtain with the appliances now in use. The greater portion of the bottom is covered with a layer of solid matter, in condition varying from coarse gravel to the finest kind of mud. The gravels are chiefly confined to the Archibenthal regions, while the true depths of the sea are carpeted with a viscid layer of the finest kind of calcareous mud or clay.

Many animals flourish in a soft bottom, especially the molluscan family Nuculidæ; others require some solid substance upon which to rest as a stone, piece of wood or the spine or test of some dead echinoderm. In muddy regions where such objects are wanting, such animals are also absent. Many are the ingenious devices resorted to by the unfortunate animals that are compelled by circumstances to exist on a muddy bottom; under these conditions we find small hermit crabs encased in the dead shell of *Dentalium*, *Amalthea* roosting on an *Echinus* spine, or *Choristes* in the empty egg capsules of rays or sharks.

The conditions governing the food supply in the ocean depths are somewhat peculiar. It has been stated that marine vegetation ceases to exist at a depth of 600 feet below the surface. Whatever light does exist in the depths is probably not sufficient for the growth of vegetation. The animals which belong to phytophagous groups seem to live chiefly on foraminifera which they swallow in great quantities. The result of such a diet is seen in the greatly enlarged intestines, the diminution of the masticatory organs, teeth, jaws, and in the mollusks, in the prolongation of the termination of the intestine as a free tube to carry the faeces away from the branchial organs. The quantity of protoplasm of the foraminifera is so small that a much larger mass must be swallowed than if the food consisted of the tissues of algae. The great mass of abyssal animals, however, are members of those groups which in shallow waters are carnivorous and prey upon each other to a great extent. In the depths of the sea this carnivorous destruction is unnecessary.

The surface of the sea is constantly teeming with millions of organisms which are constantly dying and sinking from the region to which they belong to that of the Abyssal. Hence in many regions of the deep sea the food supply is readily furnished to the animals inhabiting the depths, and is obtained with but very little effort on their part. But few mollusks are found which have been drilled by other predatory mollusks, such as are found on every ocean beach. From these facts we conclude that the animals inhabiting the deep sea do not live in perpetual conflict with one another. A small proportion of warfare doubtless goes on, but on the whole the struggle for existence is not between the individuals inhabiting the area; it is rather an industrial community, feeding, breeding and dying. Depredations are committed, however, by deep sea fishes and echini, but their inroads are not of such a character as to seriously modify the specific characteristics. It will be seen at once that the course of evolution is here very much simplified, and modifications of specific types not so pronounced as in the species inhabiting the shallow waters.

The deep sea animals did not originate in the depths, but are the descendants of those unfortunate creatures who, by circumstances carried beyond their usual depth, managed to adopt themselves to their surroundings. In this change of environment many species, and hosts of individuals, must have perished. Others more plastic survived the change and gradually spread over the oceanic floor. With the lesser need of protection from enemies a less vigorous elimination of character would follow, and we find as a result that the deep sea mollusks are more variable in their ornamentation and other superficial characters than those from shallow water. In some species the balance of characters is well maintained, while in others variation has had full play.

The shells of deep sea mollusks are generally pale or delicately tinted in color patterns. This is probably due to the absence of sunlight, which has a stimulating effect in developing colors, as is shown by the bright colors of the shallow water species of the tropics. In the Litoral Region the sunlight operates by promoting the development of color in algae which are fed upon by phytophagous mollusks and affect the coloration of the latter directly through the assimilation of the coloring matter of the food. In the deep sea these influences are wanting, and the development of color is necessarily dependent upon hereditary tendency, or some physical feature of environment not yet understood. The colors chiefly assumed by deep sea mollusks are pink or reddish, straw color, and various shades of brown. The epidermis is usually pale yellowish, but is frequently found of a beautiful and delicate green, such as is found in many of our fresh water *Paludinas*. A color pattern which is found most abundantly is that formed by square dark spots, which occasionally become fused into bands. The nacre, so common in shallow water shells, is found of additional brilliancy in abyssal shells, though more thin and delicate.

The sculpture of deep water shells is of a kind which serves to strengthen

the structure. Spirals and longitudinal hollow riblets and transverse lattice work of elevated laminæ are the principal styles of sculpture. The shells are thin, but wonderfully strong, and more or less permeable. The deep sea shells are also ornamented with large knobs and long, thin, delicate hollow spurs which are probably the remains of the heavily armed spines and knobs of their shallow water congeners. The nucleus of the deep water forms is much larger than that of the same group inhabiting shallower waters. This would seem to indicate that a small number of large larvae was more liable to survive than a large number of small ones.

The foregoing facts lead us to recognize the importance of a thorough study of the phenomena attached to deep sea life. Experiments upon shallow water forms, artificially subjected to pressure, and also upon the deep sea forms which are obtained in a living state, would undoubtedly enable us to penetrate more deeply into the mysteries of life in the extreme depths of the sea.

OUT OF DOORS AND WEDDING BELLS IN SAN DIEGO,
CALIFORNIA.

The seventh day of July, 1894, witnessed the return of the fifty-ninth wedding anniversary of C. K. Smith—Mr. and Mrs. C. K. Smith. As they have spent nearly the last two decades of life in California, and much of the time out of doors, mountain air and sea breeze has no doubt contributed to the longevity of this active and happy couple. Out of Doors in California should have its share of praise as well as the brave New England hills where life with each of them began, in 1810 for Mr. Smith and 1817 for the partner of his fifty-nine wedded years. Many will remember that Mr. C. K. Smith edited and published newspapers in Illinois very acceptably to his many readers, and that Mrs. C. K. Smith rendered valuable assistance, as occasion required; and her friends know that she still industriously plies her pen for magazines and papers under several different signatures, and that *OUT OF DOORS FOR WOMEN* is indebted to her for both prose and poetry in dreams by night and day.

All lupines are easy plants to cultivate, says "The Garden," a valuable weekly illustrated journal of horticulture and arboriculture from England. "The Garden" recommends growing lupines, aquilegias and verbascums in large masses for a fine effect.

Washington Irving says of one of his characters: "If he wanted in correctness, he made up for it in perseverance." An excellent quality!

The secret of happiness in married life is said to consist in keeping two bears in the family—bear, and forbear!

It is said unasked advice goes to the moon.

A WOMAN'S WORK FOR WOMEN.

One of the most troublesome features of the hard times is its tendency to cripple or utterly destroy the very institutions which are holding out a helping hand to the needy. An instance of this is seen in the Woman's Industrial Exchange of this city. It has helped many women in the only way in which most people are willing to be helped. In other words, it has helped them to help themselves. They have worked in the seclusion of their own homes and the Woman's Exchange has helped them to a market for their goods. Its business has been transacted in a business way by women for women, and it has been prospered exceedingly. But just now, like all other business enterprises, it is feeling the depression of the times, and, accordingly, just now its friends must stand by it. As women we cannot afford to let it close its doors.

But what can we do? For one thing we can go to the rooms and see. This will be at least an assurance of our sympathy and may help to give courage to those who are working so hard to tide the institution safely on the troubrous times.

On visiting the rooms we shall find the president herself, Mrs. G. K. Phillips, in charge. When it was learned that even a reduced salary could not be paid to a manager, Mrs. Phillips nobly stepped in and gave her services for the sake of the women who she knew would be deprived of many needed articles of food and clothing were the money they were earning through the Exchange to be cut off.

We shall also find on visiting the rooms that there are many things that can be bought here and at as reasonable figures as elsewhere, and one of the things we can do for women is to buy here all that we can without loss to ourselves.

Another thing which we must never neglect is the lunches. The fatigue of shopping days often makes the lunch in town an actual necessity and at the Woman's Exchange can be found the best of home cooking well served. And an additional relish is given to the already appetizing meal by the knowledge that by its means principally the institution lives and extends its help to that large band of women who though needy and willing to work are handicapped by ill health or are prevented from entering upon a business career by home duties. At these lunches light refreshments with a cup of tea or coffee can be had at ten cents, or a more substantial meal at a higher price. Fresh fruit can be had in its season.

But any member of the Board of Administration will be glad to furnish any further information required. We give herewith their names: President, Mrs. G. K. Phillips; vice presidents, Mrs. J. A. Young, Mrs. T. C. Stockton; secretary, Mrs. Geo. Langworthy; treasurer, Geo. W. Marston; directors, Mesdames Ballou, J. A. Young, Chas. Pauly, D. C. Collier, J. R. Berry, T. C. Stockton, A. P. Hulse, and Seaton; superintendent of rooms, Mrs. Fannie J. Coburn, and Mrs. Ellen Tierney, assistant; manager of lunch department, Miss McEllie Lake.

QUESTIONS.

The editor has an inquiry about "Torote" bark, which is reported in the East as being shipped to Europe from South California. If anyone can advise us of the facts and what the "Torote" may be we shall be greatly obliged. We know of no shrub or tree that would furnish a dye material worth shipping from either Southern or Lower California, unless it be the *Rhus integrifolia*, of doubtful utility.

TAKING BABY'S PICTURE.

Everything concerning baby is fraught with interest to all the household and with anxiety to at least one member. But if that wonderful baby has reached the mature age of nine months without having its picture taken something must be done. All ills known and unknown must be faced. It is true that baby may take cold, though in a California summer even the anxious mamma sometimes forgets this old-time bugbear. But there are other things that may happen; baby may be frightened and cry; or he may refuse to put on his most expressive expression, either of which catastrophes all mother's of babies will at once recognize as serious in the extreme.

Nevertheless, as I have said, all dangers must be faced and the picture taken. Naturally we desire the work of the best artist in our good city of San Diego. Old residents tell us to go Lenz and their advice is fortunately accepted. As we climb the stairs at the corner of Fifth and E streets to the Lenz studio, we are quite conscious of a dread of the time when the artist shall pounce upon the wonderful baby frightening his dear wits quite out of sight. But all that was borrowed trouble. This artist does nothing of the sort. He merely directs you how to place the baby in the most natural and easy position, looking carefully to all details. Then he watches for the right expression and to your great delight catches the very one you had most wished for.

So at last the dread ordeal is passed and very satisfactorily, thanks to the skill of the artist. And as a result a natural, life-like representation of the "Household King" beams upon you and carries greeting to your friends.

LITERARY NOTES.

The Ladies Home Journal for July furnishes us with an attractive feast of good and timely articles. "What Constitutes a Good Husband" is discussed by a lot of clever women such as Mary Hallock Foote, Elizabeth Stuart Phelps Ward, "The Dutchess," etc. Then there are the short stories, both good, the continuation of Frank R. Stockton's "Pomona," and of Mr. Howell's article on "My Literary Passions," with perhaps more than the usual supply of those short articles which women find so helpful and which include all kinds of subjects from House-furnishings and Luncheons and Feeding the Baby.

Demorest for July discusses the "Good Husband" subject, and that from the manly standpoint. The opinions of such men as Rev. Dr. Parkhurst, Palmer Cox, Bill Nye, Anthony Comstock and Geo. Francis Train are given. The article on "A Day in an Ice Field" is very comfortable reading in these warm July days and is withal profitable. As usual with Demorest it is full of good helpful suggestions to women as housekeeper, as mother, as wife and as a member of society in general.

INTELLECTUAL CALIFORNIA.

Two volumes are soon to appear under the above title, and will contain the official proceedings, papers and discussions of the Woman's Congress, the Religious Congress, the Educational Congress, and of all congresses held at the California Midwinter Fair; also of the Woman's Congress of Missions, Theosophical society, the "Moral force movement," exposition of the school system of California, and other matters that will interest

women and educators everywhere. It is published by Chas. Freeman Johnson, official reporter, Miles building, San Francisco, California, or subscriptions will be received by the editor of OUT OF DOORS FOR WOMEN. Price, \$6 for the two volumes. As a complete history of the California Midwinter Exposition, and of the congresses held simultaneously with it, the work will be a valuable reference and text book for any library.

NO END OF OUT-DOORS!

In a late number of the popular weekly "Garden and Forest," appears a whole column of "Out-door Books." Among the authors one is Edith M. Thomas, of which it is said: "No one but a poet could have been its author."

In the "Physio-Medical Journal," edited by the indefatigable Dr. Hasty, appears a reminiscence of the late Sir Andrew Clark, by Miss Frances E. Willard of world-wide fame. Doctor Clark's advice, among other sensible things, was: "What you need is rest, and no end of outdoors."

That is the keynote of many a wise and common sense recommendation, "no end of out-doors." This cultivating a close acquaintance with outdoors keeps those in health healthy and rejuvenates the invalids. That is if it is taken as a luxury and not as a medicine. Children do not care for pills even if sugar coated, but will devour no end of candy. Invalids will carry flowers to the sick and semi-invalids will cultivate them for friends. There must be an aim beyond and higher than the laudable one of health to make walks and exercise outdoors fully available. "'Tis more than life to live" for a noble purpose. E. E.

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 " ruber
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 " *purpurea v. gloxiniae*
Dracocephalum altaiense
 " *argunense*
Echium creticum
Eremurus turkestanicus
Glossocomia clematidea
Leontopodium alpinum
Linaria triornithophora
Morina elegans
Onopordon alexandrinum
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